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SHIN, KYUNG H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 09/964,232 | Applicant(s) GRIB ET AL. | |
| | Examiner KYUNG H. SHIN | Art Unit 2143 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application was filed on **9-26-2001**. Claims **1 - 29** are pending.

Independent claims are **1, 16, 21**.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The computer program may be intended by the applicant to embrace only program embodied on a tangible medium, it may be meant to embrace only the code itself, or it may be meant to embrace the code embodied in an intangible medium. A computer program is to be construed as a computer program per se, unless the application makes clear that the only reasonable interpretation of the word " computer program " is a product that includes code set forth on a tangible computer-readable medium. Examiner looked to the specification to determine whether the only reasonable interpretation of the claim is that the "computer program" that is directly loadable into a memory of a digital computer includes the required tangible medium (e.g., a floppy disc) or whether the broadest reasonable interpretation of the claim would be that it includes only the program per se (code alone) or the program on an intangible medium (such as a signals or carrier wave).

Claim 15 indicates “computer-readable medium containing a computer-executable instructions for performing a method by steps comprising: ” that is not limited to tangible embodiments. In view of Applicant's disclosure, specification para 1, page 8, the medium is not limited to tangible embodiments, instead it is not clearly defined tangible embodiments (e.g., RAMs, EPROMs, EEPROMs,) and intangible embodiments (e.g. signaling mechanisms and signals) are indicated.

Spec. para1, page8:

As used herein and contemplated by the invention, computer-readable medium is not limited to memory and storage devices; rather computer-readable medium is an extensible term including other storage and **signaling mechanisms** including interfaces and devices such as network interface cards and buffers therein, as well as any communications devices and **signals received and transmitted**, and other current and evolving technologies that a computerized system can interpret, receive, and/or transmit.

As such, the claim is not limited to statutory subject matter and is therefore **non-statutory**. Appropriate correction is required.

Response to Arguments

3. Applicant's arguments filed 2/19/2008 have been fully considered but are not persuasive.

3.1 Applicant argues that the referenced prior art does not disclose, “a single processor”. (Remarks Page 9)

The claimed invention does not disclose a “single” processor. The original claimed invention does not disclose a processor at all. The specification discloses: “A *first performance test of a first type is conducted over a first path between the first and*

second devices. A second performance test of the first type is also conducted over a second path between the first and second devices. These first and the second performance tests are performed simultaneously or within a close time proximity so that comparative data can be derived." (Specification Page 3). There is no mention of a "single" processor as indicated in Remarks Page 9, Lines 1-2. There is no distinction of a processor at all, merely the completion of two performance tests using different or alternate paths between the same two nodes. The processor designation for the initiation of performance tests was an amendment to the original claimed invention. It is well known in the art that a processor is required to initiate a task such as a network performance test between two network connected nodes.

In one embodiment, Beaven discloses a network that includes multiple network nodes and multiple paths between network nodes. (Beaven col 2, ll 38-41: links or nodes of a communications network; col 4, lines 8-11: connections, alternate paths) In addition, Beaven discloses a type of test such as a performance test is performed between network nodes. (Beaven col 2, l 66 - col 3, l 3: performance type tests; col 3, ll 19-24: determine performance of links) And, Beaven discloses program (processor) initiated simultaneous execution of performance type tests over multiple or alternate paths between two (a first and a second) network-connected nodes. Therefore, Beaven discloses that two communications tests of a performance type are conducted between the same two network nodes using alternate paths. (Beaven col 4, ll 8-13: simultaneous monitoring of multiple connections between two nodes; alternate paths between network nodes)

In conclusion, Beaven discloses multiple network nodes and multiple paths between network nodes as per claimed invention. And, Beaven discloses at least two tests of a particular type such as a performance type are conducted between the same two network nodes as per claimed invention.

3.2 Applicant argues that the referenced prior art does not disclose, dependent claims. (Remarks Page 10)

Arguments for dependent claims are based upon above arguments for independent claims 1, 16, 21. The successful responses to arguments for independent claims 1, 16, 21, also successfully respond to the current arguments against the dependent claims 5 - 9, 13, 17 - 20, 22 - 29.

3.3 Applicant argues that the referenced prior art does not disclose, obviousness. (Remarks Pages 9-10)

Each obviousness combination clearly indicates the claim limitation the combined reference prior art teaches. In addition, a cited passage from the referenced prior art clearly indicates the motivation for the obviousness combination. Each obviousness combination's disclosure is equivalent to the Applicant's claimed limitation(s) for the claimed invention.

Achieved advantage is a valid motivation for the combination of referenced prior art. The combination of each referenced prior art combination states a motivation for the combination, which translates to an achieved advantage for the combination.

All of the referenced prior art is in the same field of endeavor and a search by one skilled in the art would have returned the referenced prior art within the set of returned prior art.

It is not a requirement that the referenced prior art solve the same problem as claimed invention in order to be combinable. There are three criteria for combination: (1) same field of endeavor; (2) motivation for the combination; and (3) successful disclosure of claim limitation due to prior art combination.

All referenced prior art is in the same field of endeavor (network based communications testing). A search of applicant's invention field of endeavor would have revealed a set of prior art including the referenced prior art. Motivation is provided within the Office Action for each combination. The combination of the indicated referenced prior art successfully discloses the indicated claim limitations and the claimed invention.

3.3. The examiner has considered the applicant's remarks concerning a methods and an apparatus disclosed for performance measurement of multiple paths between a first device and a second device. A first performance test is conducted over a first path between the first and second devices, and a second performance test is also conducted over a second path between the first and second devices. These first and the second performance tests are performed simultaneously or within close time proximity so that comparative data can be derived. These tests may be conducted in response to client requests or may be scheduled. Applicant's arguments have been fully analyzed and considered but they are not persuasive.

After an additional analysis of the applicant's invention, remarks, and a search of the available prior art, it was determined that the current set of prior art consisting of Beaven (5,627,766), Mayton (6,763,380), Silva (6,360,268), and Zhuo (20030036865) disclose the applicant's invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1, 2, 3, 4, 15, 16, 17, 21** are rejected under 35 U.S.C. 102(e) as being anticipated by **Beaven et al.** (US Patent No. **5,627,766**).

Regarding Claim 1, Beaven discloses a method performed by one or more components in a network comprising a plurality of paths between a first device and a second device, the method comprising:

- a) conducting a first performance test of a first type (Beaven col 2, ll 44-48: communication types (i.e. a first type)) over a first path of multiple paths between first and second devices; col 3, ll 19-24; col 3, ll 58-67: measurement test of network performance (first test) for a path selected from multiple paths between two network connected devices (first, second devices))

- b) conducting a second performance test of the first type (Beaven col 4, ll 8-13: communication type (a first type) over an alternative path (second path) of the multiple paths between first and second devices); and
- c) wherein a processor initiates the simultaneous execution of the first and the second non-sequential performance tests are performed simultaneously.
(Beaven col 4, ll 8-13: concurrent, simultaneous execution of performance tests of alternate paths between nodes (first, second devices))

Regarding Claim 2, Beaven discloses the method of claim 1, wherein the first performance test produces a first set of results;

- a) wherein the second performance test produces a second set of results; (Beaven col 3, ll 19-24; col 4, ll 3-5: results are generated for performance tests (second set)) and
- b) further comprising presenting a service level performance comparison based on the first and second sets of results. (Beaven col 3, ll 19-24; col 3, ll 58-67: performance factors (service level) determined from test results, such as poor performance from latency or communication outages)

Regarding Claim 3, Beaven discloses the method of claim 2, wherein the first performance test includes a plurality of first individual performance tests performed over an extended time duration; and the second performance test includes a plurality of second individual performance tests performed over the extended time duration.

(Beaven col 4, ll 8-13: tests performed over multiple paths of network topology; col 8, line 66 - col 9, line 5: repeated tests over multiple paths between two network connected devices over an extended time period (time based tests))

Regarding Claim 4, Beaven discloses the method of claim 3, wherein each of the pluralities of first and second individual performance tests are performed at roughly periodic intervals over the extended time duration. (Beaven col 8, line 66 - col 9, line 5: time based tests (periodic intervals) performed)

Regarding Claim 15, Mayton discloses a computer readable medium containing computer executable instructions for performing a method by steps comprising: (Mayton col 5, ll 6-18: performance test system can be implemented as computer program product)

- a) conducting a first performance test of a first type over a first path of a plurality of paths between a first and second devices; (Beaven col 2, ll 44-48: communication types (i.e. a first type)) over a first path of multiple paths between first and second devices; col 3, ll 19-24; col 3, ll 58-67: test for measurement of network performance (a first test) for a route (path) selected from multiple routes (paths) between two network devices (first and second device); col 4, ll 62-67: software, program product)
- b) conducting a second performance test of the first type over a second path of the plurality of paths between the first and second devices; (Beaven col 4, ll 8-13:

communication types (a first type) over an alternative path (second path) of the multiple paths between first and second devices); and

- c) wherein a processor initiates the simultaneous execution of the first and the second non-sequential performance tests are performed simultaneously.

(Beaven col 4, ll 8-13: concurrent, simultaneous execution of performance tests of alternate paths between nodes (first, second devices))

Regarding Claims 16, Mayton discloses a network comprising:

- a) a plurality of paths between a first device and a second device; (Beaven col 4, ll 8-13: multiple (alternate) paths between two network connected nodes)
- b) means for conducting a first performance test of a first type (Beaven col 2, ll 44-48: communication types (i.e. a first type)) over a first path of multiple paths between first and second devices; col 3, ll 19-24; col 3, ll 58-67: test for measurement of network performance (a first test) for a route (path) selected from multiple routes (paths) between two network devices (first and second device))
- c) means for conducting a second performance test of the first type (Beaven col 4, ll 8-13: communication types (a first type) over an alternative path (second path) of the multiple paths between first and second devices)
- d) wherein a processor initiates the simultaneous execution of the first and the second non-sequential performance tests are performed simultaneously.
(Beaven col 4, ll 8-13: concurrent, simultaneous execution of performance tests

of alternate paths between nodes (first, second devices))

Regarding Claim 17, Beaven discloses the network of claim 16,

- a) wherein said means for conducting the first performance test includes means for generating a first set of results; wherein said means for conducting the second performance test includes means for generating a second set of results; (Beaven col 4, ll 3-5: results are generated for performance tests (first, second set)) and
- b) further comprising means for presenting a service level performance comparison based on the first and second sets of results. (Beaven col 3, ll 19-24; col 3, ll 58-67: performance factors (service level) determined from test results, such as poor performance from latency or communication outages)

Claim Rejection - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **5 - 9, 13, 17 - 20, 22 - 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Beaven** in view of **Mayton** (US Patent No. **6,763,380**).

Regarding Claims 5, 18, Beaven discloses the method of claims 1, 16. Beaven does not explicitly disclose a first transport network and a second transport network.

However, Mayton discloses wherein the first path transverses a first access network, a first transport network, and a second access network; and the second path transverses the first access network, a second transport network, and the second access network. (Mayton col 8, ll 57-63: multiple transport protocols (TCP and RTP) utilized in generating performance test data)

It would have been obvious to one of ordinary skill in the art to modify Beaven to utilize transport layer networks as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13: “... *It is increasingly important to analyze the actual performance of the network to be tested without the constraints and limitations of these existing tools. It would also be beneficial to provide network performance tools that reduce the level of expertise about network topology required of IT personnel. ...*”)

Regarding Claims 6, 19, 24, 27, Beaven discloses the method of claims 1, 16, 23. Beaven does not explicitly disclose receiving a scheduling request. However, Mayton discloses wherein further comprising receiving a scheduling request representing the first and second performance tests. (Mayton col 3, ll 16-22: perform tests based on a schedule)

It would have been obvious to one of ordinary skill in the art to modify Beaven to

enable the capability for receiving a scheduling request as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 7, Beaven discloses the method of claim 6. Beaven does not explicitly disclose that the scheduling request is received by a scheduling system. However, Mayton discloses wherein the scheduling request is received by a scheduling system; and the scheduling system communicates a first indication of the request to the first device. (Mayton col 11, ll 34-40: test scheduler communicates schedule information to endpoint nodes (first and second network devices))

It would have been obvious to one of ordinary skill in the art to modify Beaven for the scheduling request to be received by a scheduling system as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 8, Beaven discloses the method of claim 7. Beaven does not explicitly disclose that the scheduling system further communicated a second indication of the request to the second device. However, Mayton discloses wherein the

scheduling system further communicated a second indication of the request to the second device. (Mayton col 11, ll 34-40: test scheduler communicates schedule information to endpoint nodes (first and second network devices))

It would have been obvious to one of ordinary skill in the art to modify Beaven for a scheduling request to be received by a scheduling system as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claims 9, 20, Beaven discloses the method of claims 6, 19. Beaven does not explicitly disclose scheduling the first and second performance tests based on the scheduling request and a random time component. However, Mayton disclose wherein further comprising scheduling the first and second performance tests based on the scheduling request and a random time component. (Mayton col 14, ll 49-52; col 8, ll 52-57: tests are performed at random based on exception events)

It would have been obvious to one of ordinary skill in the art to modify Beaven for a scheduling request received by a scheduling system as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 13, Beaven discloses the method of claim 6. Beaven does not explicitly disclose whether a number of scheduled tests exceeds a first threshold number for the first device or exceeds a second threshold number for the second device. However, Mayton discloses wherein further comprising determining whether a number of scheduled tests exceeds a first threshold number for the first device or exceeds a second threshold number for the second device. (Mayton col 6, line 66 - col 7, line 3: threshold values are utilized)

It would have been obvious to one of ordinary skill in the art to modify Beaven for a scheduling request received by a scheduling system as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 21, Beaven discloses a network comprising:

wherein a processor initiates the simultaneous execution of a performance test is between the first device and the second device over each of the first and second transport networks simultaneously. (Beaven col 4, ll 8-13: concurrent, simultaneous execution of performance tests of alternate paths between nodes (first, second devices)) Beaven does not explicitly disclose transport networks.

However, Mayton discloses:

- a) a first device coupled to a first access network; the first access network coupled to a first and a second transport networks; (Mayton col 9, ll 38-41; col 8, ll 62-63: one or more transport protocols (i.e. TCP, UDP, RTP) utilized for network communications)
- b) a second access network coupled to the first and the second transport networks; (Mayton col 9, ll 38-41; col 8, ll 62-63: one or more transport protocols (i.e. TCP, UDP, RTP) utilized for network communications) and
- c) a second device coupled to the second access network;

It would have been obvious to one of ordinary skill in the art to modify Beaven for communications utilizing transport networks as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 22, Beaven discloses the network of claim 21. Beaven does not explicitly disclose utilizing transport networks. However, Mayton discloses wherein the first device is coupled to a first router, wherein the first router selectively routes performance testing packets received from the first device over a first path to the first transport network and a second path to the second transport network. (Mayton col 8, ll 57-63: communications implemented utilizing multiple transport protocols (TCP and RTP))

It would have been obvious to one of ordinary skill in the art to modify Beaven for communications utilizing transport networks as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 23, Beaven discloses the network of claim 21. Beaven does not explicitly disclose a performance test scheduler. However, Mayton discloses wherein further comprising a performance test scheduler. (Mayton col 11, ll 34-40: test scheduler coordinates performance testing)

It would have been obvious to one of ordinary skill in the art to modify Beaven for a performance test scheduler as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 25, Beaven discloses the network of claim 24, further comprising a results collector for receiving a set of results associated with the performance test. (Beaven col 3, ll 58-67: performance data collected)

Regarding Claim 26, Beaven discloses the network of claim 25. Beaven does not explicitly disclose transmitting at least a subset of the set of results to the client device. However, Mayton discloses wherein the results collector transmits at least a subset of the set of results to the client device. (Mayton col 8, ll 32-35: endpoint nodes (client: network devices) analyze performance data)

It would have been obvious to one of ordinary skill in the art to modify Beaven for transmitting at least a subset of the set of results to the client device as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 28, Beaven discloses the network of claim 27. Beaven does not explicitly disclose communicating a second scheduling instruction associated with the performance test to the second device. However, Mayton discloses wherein the performance test scheduler communicates a second scheduling instruction associated with the performance test to the second device. (Mayton col 3, ll 16-22: scheduling information transmitted to endpoint nodes (first and second network devices))

It would have been obvious to one of ordinary skill in the art to modify Beaven for communicating a second scheduling instruction associated with the performance test to the second device as taught by Mayton. One of ordinary skill in the art would have

been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

Regarding Claim 29, Beaven discloses the network of claim 28. Beaven does not explicitly disclose entering the test mode in response to receiving the second scheduling instruction. However, Mayton discloses wherein the second device includes a test mode; and wherein the second device enters the test mode in response to receiving the second scheduling instruction. (Mayton col 3, ll 16-22: second network devices used in generation of performance data)

It would have been obvious to one of ordinary skill in the art to modify Beaven to enable the capability for the scheduling request is received by a scheduling system as taught by Mayton. One of ordinary skill in the art would have been motivated to employ the teachings of Mayton in order to enable the capability to analyze the actual performance of the network and receive the benefit of network performance tools that reduce the level of expertise about network topology required of IT personnel. (Mayton col 3, ll 8-13)

8. Claims **10, 11, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Beaven-Mayton** and further in view of **Silva** (US Patent No. **6,360,268**).

Regarding Claim 10, Beaven-Mayton discloses the method of claim 6, further comprising a performance test scheduler between a first and second network device. (Mayton col 3, line 66 - col 4, line 9) Mayton does not explicitly disclose determining whether the scheduling request is authorized. However, Silva discloses determining whether the scheduling request is authorized. (Silva col 7, ll 10-14: determine if user has permission to perform test)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Beaven-Mayton to determine whether a scheduling request was authorized as taught by Silva. One of ordinary skill in the art would be motivated to employ Silva in order to maximize efficiency for test scheduling in the generation of network communication performance metrics. (Silva col 1, ll 44-48: “ ... *maximize efficiency in the handling of test scheduling and test execution ... automate ... testing by using a server to manage test machines and to allocate test packages ... in accordance with a schedule ...* ”)

Regarding Claim 11, Beaven-Mayton discloses the method of claim 10, further comprising a performance test scheduler between a first and second network device. Mayton does not explicitly disclose determining whether the scheduling request is not authorized. However, Silva discloses indicating that the scheduling request is not authorized. (Silva col 7, ll 10-14; col 12, ll 38-47: determine if user has permission to perform test)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Beaven-Mayton to indicate whether a scheduling request was not authorized as taught by Silva. One of ordinary skill in the art would be motivated to employ Silva in order to maximize efficiency for test scheduling in the generation of network communication performance metrics. (Silva col 1, ll 44-48)

Regarding Claim 14, Beaven-Mayton discloses a performance test scheduler between a first and second network device. Mayton does not disclose the capability to indicate a failed scheduling request. However, Silva discloses the method of claim 13, further comprising indicating a failed scheduling request. (Silva col 7, ll 10-14; col 12, ll 38-47: determine if user has permission to perform test)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Beaven-Mayton to indicate a failed scheduling request as taught by Silva. One of ordinary skill in the art would be motivated to employ Silva in order to maximize efficiency for test scheduling in the generation of network communication performance metrics. (Silva col 1, ll 44-48)

9. Claims **12** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Beaven-Mayton** and further in view of **Zhuo** (US Patent No. **20030036865**).

Regarding Claim 12, Beaven-Mayton discloses the method of claim 6. Beaven-Mayton does not explicitly disclose whereby determining whether the scheduling request conflicts with a second scheduling request. However, Zhuo discloses further

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comprising determining whether the scheduling request conflicts with a second scheduling request. (Zhuo para 063, ll 14-27: test parameters for scheduling request in conflict)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Beaven-Mayton to determine test scheduling conflicts as taught by Zhuo. One of ordinary skill in the art would be motivated to employ Zhuo in order to optimize the efficient coordination for test scheduling in the generation of network communications performance metrics. (Zhuo para 007, ll 9-11: “... *methods and systems for timely and efficient coordination and conduct of remote equipment tests would be desirable ...*”)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KYUNG H. SHIN whose telephone number is (571)272-3920. The examiner can normally be reached on 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. FLYNN can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Kyung Hye Shin
Examiner
Art Unit 2143

KHS

May 22, 2008

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154